

We claim:

1. A method for providing auto redial services to a calling party, the method comprising:
 - receiving a call request from the calling party;
 - extracting calling party and called party identifying information from the call request;
 - attempting to terminate the call to the called party based on the extracted called party identifying information;
 - determining that user equipment of the called party is unavailable;
 - determining a retry duration selected by the calling party;
 - releasing the user equipment of the calling party;
 - starting a retry duration timer which will expire when the selected retry duration has elapsed;
 - reattempting to terminate the call to the called party until the call to the called party is successfully terminated or the retry duration timer expires;
 - successfully terminating the call to the called party; and,
 - attempting to alert the user equipment of the calling party.
2. The method of claim 1 further comprising:
 - determining that the calling party is unavailable; and,
 - sending an announcement message to the called party explaining that the call is an auto redial call and that the calling party is now unavailable.
3. The method of claim 1 wherein reattempting to terminate the call to the called party comprises:
 - determining a retry interval selected by the calling party; and,
 - reattempting with a retry frequency based on the selected retry interval.
4. The method of claim 1 wherein determining a retry duration selected by the calling party comprises:
 - retrieving a pre-provisioned retry duration selected by the calling party from a subscriber database of the calling party.

5. The method of claim 1 wherein determining the retry duration selected by the calling party comprises:

 sending a message to the calling party requesting the retry duration be entered through the use of the user equipment of the calling party; and,
 receiving the retry duration entry from the user equipment of the calling party.

6. The method of claim 2 where in determining that the calling party is unavailable comprises:

 receiving a mobile busy response message from a cell site serving user equipment of the calling party.

7. The method of claim 2 where in determining that the calling party is unavailable comprises:

 receiving a mobile busy response message from a cell site serving user equipment of the calling party;
 playing a call waiting signal for the calling party; and
 determining that the calling party is not going to respond to the call waiting signal.

8. The method of claim 3 wherein determining the retry interval selected by the calling party comprises:

 retrieving a pre-provisioned retry interval selected by the calling party from a subscriber database of the calling party.

9. The method of claim 3 wherein determining the retry interval selected by the calling party comprises:

 sending a message to the calling party requesting the retry interval be entered through the use of the user equipment of the calling party; and,
 receiving the retry interval entry from the user equipment of the calling party.

10. A method for providing auto redial services to a calling party using mobile user equipment, the method comprising:

 receiving, at an MSC, a origination message including calling party and called party identification information;

receiving, at the MSC, an indication that user equipment of the called party is unavailable;

transmitting, from the MSC, a message requesting an indication as to whether an auto redial service is desired;

receiving, at the MSC, an indication that auto redial service is desired;

transmitting, from the MSC, a message requesting a retry duration specified by the calling party;

receiving, at the MSC, a calling party specified retry duration;

releasing the user equipment of the calling party for other uses;

reattempting repeatedly, for a period of time not to exceed the calling party specified retry duration, to terminate the call to the called party;

attempting to alert the user equipment of the calling party if one of the reattempts is successful; and,

terminating a call between the calling party and the called party if the attempt to alert the user equipment of the calling party is successful.

11. The method of claim 10 further comprising:
determining that the calling party is unavailable; and
sending an announcement message to the called party explaining that the call is an auto redial call and that the calling party is now unavailable.

12. The method of claim 10 wherein reattempting to terminate the call to the called party comprises:
receiving, at the MSC, a retry interval selected by the calling party;
generating, within the MSC, a retry signal with a period associated with the selected retry time; and,
sending, from the MSC, an IAM message each time the retry signal is generated.

13. The method of claim 10 wherein receiving, at the MSC, a calling party specified retry duration comprises:
receiving, at the MSC, a pre-provisioned retry duration, selected by the calling party, from a subscriber database associated with the calling party.

14. The method of claim 10 wherein receiving, at the MSC, a calling party specified retry duration comprises:

sending a message to the calling party requesting a retry duration be entered through the use of the user equipment of the calling party; and,

receiving, at the MSC, the retry duration entry from the user equipment of the calling party.

15. The method of claim 11 where in determining that the calling party is unavailable comprises:

receiving, at the MSC, a mobile busy response message from a cell site serving the user equipment of the calling party.

16. The method of claim 11 where in determining that the calling party is unavailable comprises:

receiving, at the MSC, a mobile no page response message in regard to the user equipment of the calling party.

17. The method of claim 11 where in determining that the calling party is unavailable comprises:

receiving a mobile busy response message in regard to the user equipment of the calling party;

playing a call waiting signal for the calling party; and

determining that the calling party is not going to respond to the call waiting signal.

18. The method of claim 12 wherein receiving, at the MSC, a retry interval selected by the calling party comprises:

receiving, at the MSC, a pre-provisioned retry interval from a subscriber database of the calling party.

19. The method of claim 12 wherein receiving, at the MSC, a retry interval selected by the calling party comprises:

playing a message to the calling party requesting a retry interval be entered through the use of the user equipment of the calling party; and,

receiving the retry interval entry from the user equipment of the calling party.

20. A system for providing auto redial services to a calling party, the method comprising:

means for receiving a call request from the calling party;

means for extracting calling party and called party identifying information from the call request;

means for attempting to terminate the call to the called party based on the extracted called party identifying information;

means for determining that user equipment of the called party is unavailable;

means for determining a retry duration selected by the calling party;

means for releasing the user equipment of the calling party;

means for starting a retry duration timer which will expire when the selected retry duration has elapsed;

means for reattempting to terminate the call to the called party until the call to the called party is successfully terminated or the retry duration timer expires;

means for successfully terminating the call to the called party; and,

means for attempting to alert the user equipment of the calling party.

21. The system of claim 20 further comprising:

means for determining that the calling party is unavailable; and,

means for sending an announcement message to the called party explaining that the call is an auto redial call and that the calling party is now unavailable.

22. The system of claim 20 wherein the means for reattempting to terminate the call to the called party comprises:

means for determining a retry interval selected by the calling party; and,

means for reattempting with a retry frequency based on the selected retry interval.

23. The system of claim 20 wherein the means for determining a retry duration selected by the calling party comprises:

means for retrieving a pre-provisioned retry duration selected by the calling party from a subscriber database of the calling party.

24. The system of claim 20 wherein the means for determining the retry duration selected by the calling party comprises:

means for sending a message to the calling party requesting the retry duration be entered through the use of the user equipment of the calling party; and,
means for receiving the retry duration entry from the user equipment of the calling party.

25. The system of claim 21 where in the means for determining that the calling party is unavailable comprises:

means for receiving a mobile busy response message from a cell site serving user equipment of the calling party.

26. The system of claim 21 where in the means for determining that the calling party is unavailable comprises:

means for receiving a mobile busy response message from a cell site serving user equipment of the calling party;
means for playing a call waiting signal for the calling party; and
means for determining that the calling party is not going to respond to the call waiting signal.

27. The system of claim 22 wherein the means for determining the retry interval selected by the calling party comprises:

means for retrieving a pre-provisioned retry interval selected by the calling party from a subscriber database of the calling party.

28. The system of claim 22 wherein the means for determining the retry interval selected by the calling party comprises:

means for sending a message to the calling party requesting the retry interval be entered through the use of the user equipment of the calling party; and,
means for receiving the retry interval entry from the user equipment of the calling party.